

**AMENDMENT TO THE CLAIMS:**

Pending Claims:

At the time of the Office Action-1-4, 17-20, 33-36, and 49-51.

As a result of this communication-1-4, 17-20, 33-36, and 49-52.

Currently amended Claims: 1, 17, 33, 35, 50 and 51.

New Claim: 52.

Currently cancelled Claims: None.

Claim 1 (Currently amended): A method for encoding a motion video signal, the method comprising:

determining a desired size for a first frame of the motion video signal;

encoding the first frame of the motion video signal to form an encoded frame;

determining an encoded size of the encoded frame;

comparing the encoded size to the desired size;

adjusting an encoding parameter such that encoding the first frame according to the encoding parameter as adjusted would form a different encoded frame having a size closer to the desired size than the encoded size is to the desired size, and wherein the adjusting employs first and second adjustment mechanisms, the first adjustment mechanism comprising a pre-compensator and the second adjustment mechanism comprises a first encoding adjuster and a second encoding adjuster that is based at least in part on a damping factor which reduces overcorrection of the encoding parameter; and

encoding a second frame of the motion video signal according to the encoding parameter as adjusted.

1  
2 Claim 2 (original): The method of Claim 1 wherein the second frame is  
3 subsequent to the first frame in the motion video signal.

4  
5 Claim 3 (original): The method of Claim 1 wherein the encoding parameter  
6 is a numerical representation of a compromise between consumed bandwidth and  
7 image quality of the motion video signal as encoded.

8  
9 Claim 4 (original): The method of Claim 1 wherein the step of adjusting  
10 comprises:

11 determining a difference between the encoded size and the desired size; and  
12 adjusting the encoding parameter by an amount which is proportional to the  
13 difference.

14  
15 Claims 5-16 (canceled).

16  
17 Claim 17 (Currently amended): A computer readable medium useful in  
18 association with a computer which includes a processor and a memory, the  
19 computer readable medium including computer instructions which are configured  
20 to cause the computer to encode a motion video signal by performing the steps of:

21 determining a desired size for a first frame of the motion video signal;  
22 encoding the first frame of the motion video signal to form an encoded  
23 frame;  
24 determining an encoded size of the encoded frame;  
25 comparing the encoded size to the desired size;

1 adjusting an encoding parameter such that encoding the first frame  
2 according to the encoding parameter as adjusted would form a different encoded  
3 frame having a size closer to the desired size than the encoded size is to the desired  
4 size, and wherein the adjusting employs first and second adjustment mechanisms,  
5 the first adjustment mechanism comprising a pre-compensator and the second  
6 adjustment mechanism comprises a first encoding adjuster and a second encoding  
7 adjuster that is based at least in part on a damping factor which reduces  
8 overcorrection of the encoding parameter; and

9 encoding a second frame of the motion video signal according to the  
10 encoding parameter as adjusted.

11  
12 Claim 18 (original): The computer readable medium of Claim 17 wherein  
13 the second frame is subsequent to the first frame in the motion video signal.

14  
15 Claim 19 (original): The computer readable medium of Claim 17 where the  
16 encoding parameter is a numerical representation of a compromise between  
17 consumed bandwidth and image quality of the motion video signal as encoded.

18  
19 Claim 20 (original): The computer readable medium of Claim 17 wherein  
20 the step of adjusting comprises:

21 determining a difference between the encoded size and the desired size; and  
22 adjusting the encoding parameter by an amount which is proportional to the  
23 difference.

24  
25 Claims 21-32 (canceled).

1  
2 Claim 33 (Currently amended): A computer system comprising:  
3 a processor;  
4 a memory operatively coupled to the processor and  
5 a motion video signal encoder which executes in the processor from the  
6 memory and which, when executed by the processor, causes the computer to  
7 encode a motion video signal by performing the steps of:

8 determining a desired size for a first frame of the motion video  
9 signal;

10 encoding the first frame of the motion video signal to form an  
11 encoded frame;

12 determining an encoded size of the encoded frame;

13 comparing the encoded size to the desired size;

14 adjusting an encoding parameter such that encoding the first frame  
15 according to the encoding parameter as adjusted would form a different  
16 encoded frame having a size closer to the desired size than the encoded size  
17 is to the desired size, and wherein the adjusting employs first and second  
18 adjustment mechanisms, the first adjustment mechanism comprising a pre-  
19 compensator and the second adjustment mechanism comprises a first  
20 encoding adjuster and a second encoding adjuster that is based at least in  
21 part on a damping factor which reduces overcorrection of the encoding  
22 parameter; and

23 encoding a second frame of the motion video signal according to the  
24 encoding parameter as adjusted.  
25

1 Claim 34 (original): The computer system of Claim 33 wherein the second  
2 frame is subsequent to the first frame in the motion video signal.

3  
4 Claim 35 (Currently amended): The computer system of Claim 33 ~~where~~  
5 ~~in~~ wherein the encoding parameter is a numerical representation of a compromise  
6 between consumed bandwidth and image quality of the motion video signal as  
7 encoded.

8  
9 Claim 36 (original): The computer system of Claim 33 wherein the step of  
10 adjusting comprises:

11 determining a difference between the encoded size and the desired size; and  
12 adjusting the encoding parameter by an amount which is proportional to the  
13 difference.

14  
15 Claims 37-48 (canceled).

16  
17 Claim 49 (previously presented): A computer readable medium comprising  
18 instructions which, when executed by a computer, performs the method of Claim  
19 1.

20  
21 Claim 50 (Currently amended) A method, comprising:  
22 determining a desired size for a first frame of a the motion video signal;  
23 encoding the first frame of the motion video signal to form an encoded  
24 frame;  
25 determining an encoded size of the encoded frame;

1 comparing the encoded size to the desired size;

2 adjusting an encoding parameter such that encoding the first frame  
3 according to the encoding parameter as adjusted would form a different encoded  
4 frame having a size closer to the desired size than the encoded size is to the desired  
5 size, and wherein the adjusting employs first and second adjustment mechanisms,  
6 the first adjustment mechanism comprising a pre-compensator and the second  
7 adjustment mechanism comprising encoding—analyzes—both a first encoding  
8 adjuster and a second different encoding adjuster; and

9 encoding a second frame of the motion video signal according to the  
10 encoding parameter as adjusted.

11  
12 Claim 51 (Currently amended) The method of claim 50, wherein the pre-  
13 compensator is operable to adjust the encoding parameter based on a degree of  
14 change between the first frame and the second frame, and the first encoding  
15 adjuster comprises a primary open loop rate control adjuster and the second  
16 encoding adjuster comprises a secondary closed loop rate control adjuster, and  
17 wherein a higher weight is given to the secondary closed loop rate control adjuster.

18  
19 Claim 52 (New) The method of claim 51, wherein the degree of change  
20 comprises an absolute pixel difference between the first and second frames.